

**The Municipal Separate Storm Sewer System  
(MS4)  
NPDES PERMIT**

**Idaho Transportation Department District 3**

**Annual Report:  
November 2010 – October 2011**

**Prepared by Idaho Transportation Department,  
District 3 Environmental Section  
November 2011**

**Idaho Transportation Department  
District Three  
NPDES Annual Report  
November 2011**

This report identifies the activities undertaken by District 3 (District) of the Idaho Transportation Department (ITD) during the current permit year of November 1, 2010 through October 31, 2011, in compliance with the National Pollutant Discharge Elimination System (NPDES) storm water permit issued by the Environmental Protection Agency (EPA), effective on November 29, 2000. This report addresses only updates to information contained in the Annual Reports between the years of 2001 through 2010 and the permit conditions that must be addressed in subsequent permit years that apply exclusively to the District's system. It does not address activities conducted on behalf of the District by another co-permittee, such as Boise City's public education program or the monitoring program conducted by the Ada County Highway District (ACHD). Each permit condition is listed and then followed by a summary of how ITD addressed that condition, in compliance with permit requirement, Part IV, E.1.a. Annual Report.

Structural Controls and Maintenance

*Permit Condition A.1.a. Co-permittees shall adopt design manuals that incorporate Best Management Practices (BMPs) and operation and maintenance criteria for all existing and future structural controls under the jurisdiction of the co-permittees. This requirement may be satisfied by adopting by reference all or elements of the design manuals and guidebooks developed by other co-permittees, including the May 2004 Boise Storm Water Best Management Practices Guidebook, the ITD 2008 Erosion and Sediment Control-Best Management Practices Manual, and the 2005 ACHD Development Policy Manual.*

The District is responsible for structural controls that include roadways and associated drainage facilities, bridges, roadsides, and traffic control devices. Drainage facilities include gutters, culverts, ditches, swales, pipes, poly drains, French drains, catch basins/inlets, sand and grease traps, edge drains, transverse drains, and retention/detention ponds. Criteria for the design, operation and maintenance of the structural controls that collect, convey, store, treat, or discharge storm water runoff are contained in the Department's *Design Manual*, *ITD Standard Specifications for Highway Construction*, *ITD Maintenance Operations Procedures Manual*, *ITD Maintenance Manual*, and the *2008 Erosion and Sediment Control-Best Management Practices Manual*. All of the aforementioned documents have been formally adopted. During the past year ITD has revised portions of the BMP Manual and the Erosion and Sediment Control Manual to include updated drawings and updated BMP applications.

*Permit Condition A.1.b. Operation and Maintenance program. Co-permittees shall develop and implement an operation and maintenance program, to include the following:*

- *Definitive inspection and maintenance schedules for all co-permittee-owned structural controls which include the frequency of routine inspections. Actual inspections shall also be tracked.*
- *Guidelines and criteria for maintenance activities that are to be implemented for co-permittee-owned structural controls, as well as a description of the maintenance activities required such as "disposal of sediment" and "removal of debris."*

- *A description of the inspection, operation, and maintenance of storm water retention facilities owned or operated by co-permittees.*

Permit Condition A.1.c. *Inspection and Maintenance Record Keeping. Each co-permittee that owns or operates structural controls shall maintain an internal record-keeping system to track inspections and maintenance for those portions of the MS4 operated by the co-permittee.*

The ITD *Maintenance Operations Procedures Manual* provides guidelines and policies for maintaining the state highway system and performance standards for ITD maintenance activities. The *2008 Erosion and Sediment Control-Best Management Practices Manual* includes temporary and permanent erosion and sediment controls. Maintenance guidelines are included for these controls. In addition, a Maintenance Storm Water Manual has been developed for District 3 maintenance activities. This document was included in the Year 2 annual report. Structural controls on the state highway system not covered by the agreement with one of the co-permittees are inspected annually by ITD maintenance crews. ITD continues development of a new tracking data base to track inspection and maintenance activities by highway segment for ITD's Storm Drain Inventory. ITD is looking for funding to allocate for the development of digital mapping within a two year timeframe. When digital mapping is complete the info will be used to enhance our tracking abilities as well as to provide geographical data.

ITD incorporates storm water management into its in-house inspection certification and training courses. Courses include information on inspections to ensure proper BMP installation, maintenance, and use. In addition, federal and state laws as well as local ordinances are used as guides for ITD maintenance operations.

#### Floatables

Permit Condition A.2.b. *The co-permittees shall implement a program or programs, such as the Adopt-a-Highway program, to facilitate litter removal from selected highways two times a year or as needed.*

Litter pickup is conducted by ITD maintenance crews and "Adopt-A-Highway" sponsors. The District's maintenance section administers the "Adopt-A-Highway" program, a voluntary litter pickup program. Litter is picked up at least twice per year as mandated by the "Adopt-a-Highway" work agreement.

Permit Condition A.2.c. *The co-permittees shall ensure that the streets for which they have maintenance authority and responsibility are swept as needed to reduce the discharge of pollutants to the MEP. Co-permittees shall compile a report on the sweeping activity and shall assess the above levels of effort in each of the designated land use type areas with respect to the mitigation of contribution of pollutants from the highways and other public areas that are maintained.*

Sweeping of all ITD roads within the permit area except I-84, is done by ACHD through a cooperative agreement which was attached in a previous report. Sweeping activity conducted under this agreement is tracked by ACHD. ITD District 3 does sweep portions of SH-44, SH-55 and SH-20/26. An evaluation of the adequacy of the level of effort on state highways within the permit area has been done by ACHD as part of the overall evaluation of their sweeping activities. Sweeping activity on I-84, by the District, is conducted as needed and within 48 hours of every

deicing event when sand and/or salt is used. ITD District 3 sweeping activities are tracked in a new data base called TAMS, (Transportation Asset Management System).

### Roadways

*Permit Condition A.4.a. Co-permittees shall develop a management practices program. This program shall include those management practices identified during the inventory of co-permittee-owned storm water facilities and audit of site activities undertaken as part of the application for the MS4 Permit. The program shall also evaluate ways to reduce pollutant discharges associated with road maintenance and rehabilitation operation.*

The management practices are currently outlined in the Department's *Design Manual*, *ITD Standard Specifications for Highway Construction*, *ITD Maintenance Operations Procedures Manual*, *ITD Maintenance Manual*, and the *2008 Erosion and Sediment Control-Best Management Practices Manual*. These documents were included in the 2008/2009 annual reports.

*Permit Condition A.4.b. Co-permittees shall monitor the application of chemicals and sand applied to roadways for snow and ice control. Co-permittees shall implement programs for proper storage of de-icing materials to prevent materials from entering the storm sewer system, and research alternatives to salt for use in de-icing.*

The TAMS data base is also utilized by the District to track the application of magnesium chloride and salt on roads within the District. A review of the individual reports indicates that approximately 414,400 gallons of magnesium chloride/ice slicer were applied by the District in the MS4/NPDES permit area. ITD District 3 has ordered 614,400 gallons of magnesium chloride/ice slicer for the year 2011/2012. ITD District 3 has ordered 7600 tons of dry salt for potential use for the year 2011/2012.

Records are kept in the Transportation Asset Management System (TAMS) for maintenance in regards to both sanding and de-icing activities. The magnesium chloride materials used within the NPDES permit area are located within and out of the permit area. Staging and storage areas for magnesium chloride and dry salt within the NPDES permit area have all had modifications to minimize pollutants that could enter into storm drainage facilities. The Boise stockpile is stored under a covered shed to protect materials from weather related precipitation impacts. Storm water that does contact the stockpile is retained and treated on site through a shallow sand swale located adjacent to the stockpile.

ITD has the ability to use the new Transportation Asset Management System to provide a tracking method for ITD sweeping and de-icing activities with respect to specific roadway segments. This provides an opportunity to express sanding/de-icing activities in both quantitative and qualitative means. Details and processes are being worked out on exactly what information is to be included into the new TAMS data base.

### Flood Management Facilities

Permit Condition A.5.a. *Co-permittees shall complete an inventory of all existing structural flood control devices within their jurisdictions to determine the feasibility of retrofitting them to provide additional pollutant removal.*

Permit Condition A.5.b. *Co-permittees shall develop procedures to assure that flood management projects assess the impacts on the water quality of the receiving water.*

The NPDES Permit defines “structural flood control device” to mean a device which has been designed and installed for the purpose of storm drainage during storm events. Within the NPDES permit area, District 3 does not own or operate any facilities that meet this definition.

### Illicit Discharges and Improper Disposal

Permit Condition A.7.a. *Co-permittees shall work together to implement a program to inspect and enforce against illicit connections. The program shall include a requirement to update the inventory of all major outfalls within the jurisdictions of the co-permittees.*

*Co-permittees shall use the results of existing and on-going dry-weather screening and citizen reports as the primary basis for locating illicit discharges. Co-permittees shall ensure that an appropriate number of personnel receive training in the detection of illicit connections. The program shall include a requirement to update the inventory, within 6 months of the effective date of the permit, of all major outfalls within the jurisdictions of the co-permittees. Co-permittees shall ensure compliance with this program element by inspecting 20% or more of the major outfalls per permit year, totaling 100% of outfalls by the conclusion of the first permit term. If illicit connections are identified or detected, co-permittees shall require their disconnection.*

Permit Condition A.7.b. *Each co-permittee shall require the elimination of illicit connections as expeditiously as possible and the immediate cessation of improper disposal practices upon identification of those responsible.*

Permit Condition A.7.c. *Co-permittees shall implement complaint investigation procedures to guide staff through recording, investigating and following up on complaints regarding violations reported by the general public.*

The Boise NPDES permit area is contained solely within the ITD’s District 3 jurisdiction. The District has 2 major outfalls in the NPDES permit area that are maintained. They are located in the vicinity of Barrister Dr. at Cole and Americana Boulevard at Kathryn Albertson Park. These outfalls receive discharges and connections from multiple jurisdictions. Screening of both major outfalls was completed during dry weather for the 2010-2011 permit year. District roadways within the NPDES permit include I-84; I-184; US/SH 20/26; SH 21; SH 44; and SH 55. Outfall inventory field notes and pictures are included in the attachments as Exhibit A.

The District also coordinates with the co-permittees for identification and elimination of illicit connections for portions of the state highways included in the NPDES permit area, with the exception of the interstate highway, I-84.

Complaint investigation procedures are in place and are described in the Complaint Response Manual, which was included in the Year 2 annual report. The District also coordinates with the co-permittees in receiving and responding to citizen complaints. The District has also entered into cooperative agreements with Boise City and Garden City that gives Boise City and/or Garden City the authority to enforce illegal actions within ITD jurisdiction as requested. A copy of the cooperative agreement with Boise City was included in the Year 2 annual report. A copy of the cooperative agreement with Garden City was included in the Year 3 annual report. Both agreements have been renewed.

#### Spill Prevention and Response

Permit Condition A.8.a. *Co-permittees shall participate in an interagency spill response task group to ensure that a coordinated response to spills is achieved and that impacts upon aquatic resources from spilled pollutants are controlled to the MEP.*

ITD has in place an Emergency Response Program and a Hazardous Materials/Hazardous Waste Program to deal with the prevention, response, and containment of any spills that occur on ITD right-of-way. During the last year ITD had no incidents concerning the need to contain any spills. Several other agencies also participate in the State Response System. Spill records are kept by the Idaho State Police. In Ada County, Ada County Emergency Management coordinates these activities and the District has participated in their meetings. A copy of the relevant portions of the *Idaho Transportation Department Maintenance Manual* pertaining to Hazardous Material/ Incidents or Spills and a copy of *The Idaho Hazardous Materials Response Plan* was included in the Year 2 annual report.

#### Construction Site Runoff

Permit Condition A.10.a. *Co-permittees shall implement a Construction Site Discharge Control Program 18 months from the effective date of the permit. The program shall contain elements to control the contribution of pollutants from the construction site activity to the MEP.*

Permit Condition A.10.b. *Co-permittees shall conduct inspection of construction sites to ensure compliance with the measures outlined in II.A.10(a).*

Permit Condition A.10.c. *Co-permittees shall develop and maintain a database of all active and completed construction sites permitted within their jurisdiction and completed during the term of this permit.*

Language addressing storm water control and Clean Water Act compliance is included in ITD construction project contracts. Specific information concerning contractor responsibility for the containment and management of storm water is included in the Special Provisions section of the construction contract.

The Department's *Design Manual*, *ITD Standard Specifications for Highway Construction*, the *Contract Administration Manual*, and the *2008 Erosion and Sediment Control-Best Management Practices Manual* contain sections devoted to erosion and pollution control measures for application on active construction sites. These BMPs help to minimize the erosion and sedimentation generated during the construction phase of a project. All of these documents have been formally adopted.

ITD staff receives training in the application, design, installation and maintenance of BMPs to the extent necessitated by their respective responsibilities. ITD has implemented a two day SWPPP development training class for designers.

ITD maintains and updates the ITD Storm Water Pollution Prevention Plan (SWPPP) Template to account for any internal changes. ITD uses a template format that follows a similar model to that of the EPA revised October 2007 example. This template is intended to help operators by incorporating ITD policies, NPDES Construction General Permit Requirements, and other local, state, and federal rules and regulations into a comprehensive template that functions to help in achieving compliance. The Storm Water Pollution Prevention Plan (SWPPP) Template example was provided in the attachment section of the 2007-2008 annual report. During the current year, ITD updated and modified its ITD-2802 Storm Water Compliance Inspection form. The revised form was provided in the attachment section of the 2009-2010 annual report.

Within the current permit year, five projects were managed by the District in the MS4 permit area (listed below). All of the projects listed regardless if completed or not have had ongoing inspections and monitoring to ensure temporary and final erosion and sediment control best management practices are working or that final stabilization measures have occurred. On going inspection monitoring provides a tool to help in obtaining compliance with the Construction General Permit and Storm Water Pollution Prevention Plan (SWPPP) requirements. ITD has conducted the following inspections on projects within the MS4 permit area:

- Vista Avenue Interchange has had 94 total inspections conducted (this project was completed and terminated).
- Cole Road to Orchard Street has had 91 weekly inspections and is currently under construction.
- 36<sup>th</sup> Street Pedestrian Bridge, Garden City has had 31 weekly inspections conducted (this project was completed and terminated).
- Five Mile Road and Fairview Avenue has had 89 weekly inspections conducted ( this project was completed and terminated).
- Franklin Road and Cloverdale Road Intersection has had 51 inspections and is currently under construction.

Copies of inspection forms are kept on file at District 3 Office. No citations, notice-of-violations, or stop work orders have been issued by the District with respect to NPDES or other erosion and sediment control issues. Educational materials and other outreach events relevant to the NPDES permit are cosponsored by ITD D3 and provided by Boise City.

#### Public Education

Permit Condition A.11.a. *The co-permittees shall implement a program to inform the public of the impact of pollutants in storm water on waters of the United States and how to avoid adding such pollutants to storm water runoff.*

The District makes available at all project preconstruction conferences an educational brochure titled, "Storm Water Pollution Prevention Plan Questions & Answers That Relate to Ensuring Compliance." This brochure provides answers and information to Operators on some of the most commonly asked questions relating to Storm Water Pollution Prevention Plan

requirements and compliance. A copy of the brochure was provided in the 2007-2008 annual report for reference. The brochure is currently being updated. ITD now provides employees with a quarterly news letter devoted to storm water education. The newsletter is also available on the ITD environmental web site.

ITD Environmental has developed and maintains an online web site that contains information and links to NPDES/CGP/Stormwater information. This site and corresponding information can be accessed through the following link:

<http://itd.idaho.gov/enviro/Storm%20water/default.htm>

Public Education is also covered in the Boise City report.

#### Legal Authority

*Permit Condition C. Legal Authority. Co-permittees shall include with the first annual report a demonstration that each co-permittee possesses legal authority that satisfies the six criteria listed. Co-permittees shall include with this demonstration; copies of all statutes, ordinances, permits, contracts, orders or inter-jurisdictional agreements that they contend demonstrate the adequacy of their legal authority.*

The Idaho Transportation Department (ITD) is an executive branch agency of the State of Idaho. ITD's duties include but are not limited to proper planning, construction, maintenance, operation and protection of the state highway system. As an executive branch state agency, ITD has very broad rule making authority. Additionally, ITD has broad intergovernmental contracting authority.

The powers and authorities of ITD are contained in the Idaho Code, Title 40, Chapter 3 (Idaho Transportation Board), Chapter 4 (Idaho Turnpike Authority), Chapter 5 (Idaho Transportation Department), and Chapter 6 (County Commissioners and Highway Officers). Copies can be found in Appendix A of the Part 2 NPDES Municipal Storm Water Permit Application, submitted by the co-permittees.

The Idaho Transportation Board is vested with authority, control, supervision and administration of the Department. Pursuant to Section 40-310 (3), the Board shall "locate, design, construct, reconstruct, alter, extend, repair and maintain state highways, and plan, design and develop statewide transportation systems".

The District controls third-party activities on District rights-of-way through the conditions associated with encroachment permits. IDAPA 39.03.42, "Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way," provides ITD with access control through a permitting process. The rule defines an encroachment as "any authorized or unauthorized use of highway right-of-way or easements or air space immediately above the highway right-of-way." (IDAPA 39.03.42, 010.30). Encroachment permit conditions require compliance with Federal and State of Idaho standard plans and specifications. Encroachment permits are also conditioned to require environmental compliance, including implementation of applicable BMPs comparable to those required of ITD.



The rule contains specific provisions controlling drainage and storm water. When border area work is permitted, the rule requires "that adequate sight distance, proper drainage, desirable slopes for maintenance operations, and a pleasing appearance are provided." (IDAPA 39.03.42, 400.12). The rule provides ITD with additional drainage control through the requirement that "All approaches shall be graded so that private properties abutting the highway right-of-way do not drain onto the traveled way, do not impair the drainage within the right-of way, alter the stability of the roadway subgrade or materially alter the drainage of areas adjacent to the right-of-way. Post-development drainage flows shall not exceed predevelopment drainage flows." (IDAPA 39.03.42, 400.13.a.). ITD's addition of a Development Services Section provides a formal opportunity to review and provide comments from ITD to land use agencies and developers with input from the Environmental Section.

An approved right-of-way encroachment permit is required for irrigation or drainage within state highway right-of-way (IDAPA 39.03.42, 600.01) and Best Management Practices (BMPs) are required to temporarily control for erosion and sediment (IDAPA 39.03.42, 600.04).

Unauthorized and nonstandard encroachments are prohibited and they may be removed or their use may be suspended (IDAPA 39.03.42, 800.02). It is this provision that gives ITD the authority to control illicit discharges and illegal connections to their MS4.

The District coordinates with other permittees on storm water management responsibilities, especially when discharges from one permittees system flow to storm water systems owned and operated by another permittee. Coordination is implemented through formal and informal discussions, meetings, agreements and procedures. This coordination includes attending meetings, participating in special studies, identifying storm water run-on issues, reporting spills, etc.

The legal authority criteria and their applicability to ITD are as follows:

1. *Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the MS4 by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity.* The Boise City Storm Water Management Ordinance and the Ada County Highway District Developmental Policy Manual addresses industrial activities. Authorities contained in IDAPA 39.03.42 can also be used to address unpermitted discharges to the ITD system from an industrial activity.
2. *Prohibit through ordinance, order or similar means, illicit discharges to the MS4.* The Boise City Storm Water Management Ordinance and the intergovernmental agreement between the co-permittees address this criterion. Additionally, illicit discharges to the ITD system can be addressed by authorities contained in IDAPA 39.03.42.
3. *Control through ordinance, order, or similar means the discharge to the MS4 of spills, dumping or disposal of materials other than storm water.* The Boise City Storm Water Management Ordinance and the intergovernmental agreement between the co-permittees address this criterion. Additionally, unpermitted discharges to the ITD system can be addressed by authorities contained in IDAPA 39.03.42 and through agreements with Boise City and Garden City that gives them the authority to enforce illegal actions in ITD jurisdiction as requested by ITD.

*The existing intergovernmental agreement between the agencies has been extended and will expire at the time the new MS4 permit is issued. At that time the co-permittees will assess the agreement as required to examine if any changes are needed. A copy of the extension is attached.*

4. *Control through interagency agreements among co-permittees the contribution of pollutants from one portion of the MS4 to another portion of the MS4. The intergovernmental agreement between the co-permittees addresses this criterion.*
5. *Require compliance with conditions in ordinances, permits, contracts or orders. This authority is contained in sections of Idaho Code, cited above.*
6. *Carry out all inspection; surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the MS4. This authority is contained in sections of Idaho Code, cited above, and authorities contained in IDAPA 39.03.42.*

#### Budget

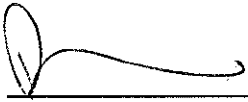
The District pays for the program cost share out of General Operating Expenses. ITD has paid approximately \$14,925.00 towards their share of program costs for 2010/2011 and have budgeted approximately \$25,000 for their share of the program costs for 2010/2011. Additionally, this past year the District has one environmental planner on staff that devotes 50 percent of their time to the NPDES program and coordination with co-permittees. The approximate cost for ITD employee time spent for the MS4 permit is \$13,000.00.

**Annual Report Certification**

***Idaho Transportation Department NPDES Municipal Separate Storm Sewer System Annual Report For Permit Year 2010-2011***

***Boise City and Garden City, Idaho Area  
NPDES Stormwater MS4 Permit***

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 District Engineer

**Name/Title**

Dave Jones, District Engineer

Idaho Department of Transportation

11-15-11  
**Date**

## **List of Attached Documents**

Appendix A: Dry Weather Screening of Outfalls

## Exhibit A:

# NPDES MS4, 2010-2011 OUTFALL OBSERVATION FIELD NOTES

October 27, 2011

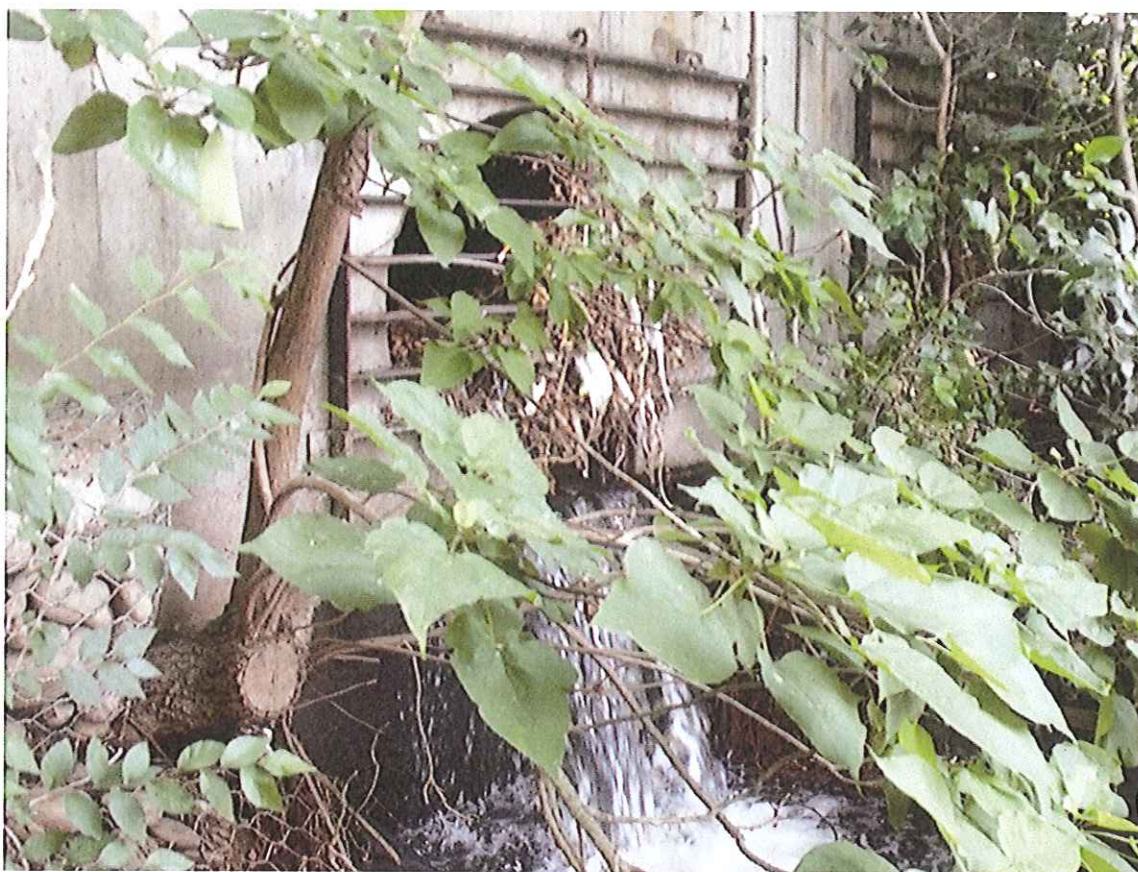
Weather Conditions--- Cool – 55-65  
degrees

River Street Drain (north side Americana Bridge):

- 2 Outlets in Area, Covered by Trash Racks
- 48" West Outlet Discharging Water
- No sheens from discharge coming from pipe.
- Water was clear in color and free from odor.
- Grate has some debris/floating and was cleaned after taking the picture
- 42" East Outlet Observed Dry
- Grate had small amount of debris/floating and was cleaned after taking the picture







Cole and Franklin Roads (north side of Barrister Road into Ridenbaugh Canal):

- No sign of any sheens or discharges...dry.
- 2 Outlets in Area
- 12" East Outlet (Private Outlet)---No discharge.
- 36" West Outlet (Picture Shown next page)---Minimal/No discharge.



